

REMARKS

The applicant respectfully requests reconsideration in view of the amendment and the following remarks. Support for amended claims 19 and 20 can be found in claims 19 and 20. Support for newly added claims 28 and 29 can be found in the specification at page 5, lines 30-36.

The applicant appreciates that the Examiner has allowed claims 11-18 and 25.

Claims 19-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vandenhende et al (US Publication No. 2003/0119925) (Vandenhende). The applicant respectfully traverses these rejections.

Rejections under 35 U.S.C. 112

Claims 19-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has deleted the dispersants from claims 19 and 20. For the above reasons, this rejection should be withdrawn.

Rejections under 35 U.S.C. 103(a)

Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vandenhende. The applicant has the following comments based on the Examiner's rejection:

At page 4, first paragraph of the Official Action, the Examiner states:

(2) polyvinyl alcohol inherently contains a wide distribution of segments that encompass various degrees of hydrolysis, i.e., some areas may contain more acetate groups and some may contain more hydroxyl groups. Components with more hydroxyl groups will inherently gave a greater affinity to the non-solvent and the components with less hydroxyl groups will have an inherently greater affinity to the solvent. Thus, the dispersant used by Vandenhende corresponds to the two dispersants used by applicant since both function in the same manner of having a greater affinity to the solvent or to the non-solvent.

As previously stated in the applicant's last response, paragraph no. [0025] in Vandenhende discloses the use of dispersing agents. This paragraph lists bentonite, gelatin, esters of cellulose, ethers of cellulose, water-soluble (co)polymers and polyvinyl alcohol as dispersing agents. Polyvinyl alcohol is therefore cited in a list of dispersing agents. There is further nowhere else in this document a specific disclosure of the use of polyvinyl alcohol as dispersing agent.

It is therefore not realistic to imagine that on the basis of the mention of polyvinyl alcohol in the list of dispersing agents that can be used to reduce the size of the particles, it can be concluded that "one of ordinary skill in the art would have known to choose polyvinyl alcohols with more or less hydroxyl groups depending on the intended use while working with the solvent or with the non-solvent, such as obtaining small diameter particles, as disclosed by Vandenhende", as recited in the Official Action.

In the paragraph bridging pages 4 and 5 of the Office Action, the Examiner refers to paragraph no. [0025] of Vandenhende. Vandenhende states in paragraph [0025]:

"From a practical viewpoint, this¹ is advantageously added to the solvent from the beginning of the dissolution of the plastic. Alternatively, this dispersing agent may be added at the same time as the non-solvent used for the precipitation (either in the same stream or separately) ... **but this procedure is more difficult to monitor and could lead to a lack of homogeneity of the medium.**" (emphasis added)

This means that the addition of the dispersing agent at the same time as the non-solvent is not recommendable. Further, Vandenhende mentions the possible addition of the dispersing agent at the same time as the non-solvent while in the process according to claim 26, the non-solvent is introduced gradually into the precipitation medium leading to first a phase separation and then a phase inversion after which the dispersing agent is added. This means that the dispersing agent is not added at the same time as the non-solvent as in Vandenhende.

At pages 6 and 7 of the Office Action, the Examiner comments on the data of the examples described in the specification. Comparing the results of examples 6, 7 and 8 with the results of (comparative examples R1 and R2), all of them involving the treatment of 11 weight % PVC suspension, it can be shown that the ASG/d ratio is higher for examples 6, 7 and 8 than the one obtained for the comparative examples.

¹ Referring to the dispersing agent
735512

Furthermore, considering the total quantity of the two dispersants which are used, it can be noted that examples 6, 7 and 8 for which the total quantity of the two dispersants is 0.6 weight %, lead to a higher ASG/D ratio **than example 5 characterized by the same total quantity of the two dispersants**. Examples 6, 7 and 8 use 0.6 wt % of dispersant while examples R1 and R2 use 0.3 wt %, the applicant has previously pointed out in the previous response that the total quantity of the two dispersants does not influence the ASG/d result as clearly demonstrated by the comparison of Examples 6, 7 and 8 with Examples which uses also 0.6 wt % (see page 10 of the Amendment filed April 24, 2009).

Again, this comparison clearly demonstrates that the total quantity of the two dispersants does not influence the ASO/d result.

Moreover, the applicant believes that the fact that the comparison of Examples 6, 7 and 8, during which dispersing agent I is primarily added during dissolution and dispersing agent II is primarily added after phase inversion, with Examples, during which dispersing agent I as well as dispersing agent II are added during dissolution, illustrates that the ASG/d is higher for Examples 6, 7 and 8 than for Example 5 (with the same total amount of dispersing agents and the same concentration of PVC in the solution).

This means that when dispersant I is primarily added before the phase inversion and dispersing agent II is primarily added after the phase inversion (Examples 6, 7 and 8), as recited in Claim 26, better results are obtained than when adding the two dispersing agents before the phase invention (Example 5). This comparison clearly illustrates the advantages brought by the process according to Claim 26.

Finally, with respect to the Examiner's last comment "[i]t is also noted that examples 7 and 8 don't seem to follow a pattern when compared to examples 5 and 6", the applicant points to the fact that the wording of Claim 26 specifies that dispersant I and dispersant II are primarily added to the precipitation medium. The definition of the word "primarily" is given on page 5, lines 33-36 and page 6, lines 2-5 of the specification i.e. "a majority weight fraction i.e. greater than 50%".

While Example 6 describes the introduction of the complete quantity of dispersant II after the phase inversion, Examples 7 and 8 describe the introduction of part of dispersant II before the phase inversion and part thereof after the phase inversion; this last part being more than 50% by weight of all dispersant II. Both Example 6 and Examples 7-8 are illustrating the process according to claim 26. For the above reasons, this rejection should be withdrawn.

No additional fee is due. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 05129-00117-US from which the undersigned is authorized to draw.

Dated: November 30, 2009

Respectfully submitted,

Electronic signature: /Ashley I. Pezzner/
Ashley I. Pezzner
Registration No.: 35,646
CONNOLLY BOVE LODGE & HUTZ LLP
1007 North Orange Street
P. O. Box 2207
Wilmington, Delaware 19899-2207
(302) 658-9141
(302) 658-5614 (Fax)
Attorney for Applicant